



# SEQUENCE LISTING

<110> Dov ZIPORI et al.

<120> T CELL RECEPTOR VARIANTS EXPRESSED IN MESENCHYMAL CELLS AND USES THEREOF

<130> 85189-4900

<140> 10/642,642

<141> 2003-08-19

<150> PCT/IL 02/00130

<151> 2002-02-20

<150> 141539

<151> 2001-02-20

<160> 86

<170> PatentIn version 3.1

<210> 1

<211> 26

<212> PRT

<213> Mus musculus

<400> 1

Met Glu Asn Val Ser Asn Pro Gly Ser Cys Ile Glu Glu Gly Glu Glu  
1 5 10 15

Arg Gly Arg Ile Leu Gly Ser Pro Phe Leu  
20 25

<210> 2

<211> 19

<212> PRT

<213> Mus musculus

<400> 2

Met Gly Glu Tyr Leu Ala Glu Pro Arg Gly Phe Val Cys Gly Val Glu  
1 5 10 15

Pro Leu Cys

<210> 3

<211> 4

<212> PRT

<213> Mus musculus

<400> 3

Met Ala Trp His  
1

<210> 4  
<211> 19  
<212> PRT  
<213> Mus musculus

<400> 4

Met Glu Ala Gly Trp Glu Val Gln His Trp Val Ser Asp Met Glu Cys  
1 5 10 15

Leu Thr Val

<210> 5  
<211> 6  
<212> PRT  
<213> Mus musculus

<400> 5

Met Glu Cys Leu Thr Val  
1 5

<210> 6  
<211> 3  
<212> PRT  
<213> Mus musculus

<400> 6

Met Thr Val  
1

<210> 7  
<211> 13  
<212> PRT  
<213> Mus musculus

<400> 7

Met Cys Gly Ser Glu Glu Val Phe Val Val Glu Ser Ala  
1 5 10

<210> 8  
<211> 92  
<212> PRT  
<213> Mus musculus

<400> 8

Met Ala Cys Tyr Gln Met Tyr Phe Thr Gly Arg Lys Val Asp Glu Pro  
1 5 10 15

Ser Glu Leu Gly Ser Gly Leu Glu Leu Ser Tyr Phe His Thr Gly Gly  
20 25 30

Ser Ser Gln Ala Val Gly Leu Phe Ile Glu Asn Met Ile Ser Thr Ser  
35 40 45

His Gly His Phe Gln Glu Met Gln Phe Ser Ile Trp Ser Phe Thr Val  
50 55 60

Leu Gln Ile Ser Ala Pro Gly Ser His Leu Val Pro Glu Thr Glu Arg  
65 70 75 80

Ala Glu Gly Pro Gly Val Phe Val Glu His Asp Ile  
85 90

<210> 9  
<211> 87  
<212> PRT  
<213> Mus musculus

<400> 9

Met Tyr Phe Thr Gly Arg Lys Val Asp Glu Pro Ser Glu Leu Gly Ser  
1 5 10 15

Gly Leu Glu Leu Ser Tyr Phe His Thr Gly Gly Ser Ser Gln Ala Val  
20 25 30

Gly Leu Phe Ile Glu Asn Met Ile Ser Thr Ser His Gly His Phe Gln  
35 40 45

Glu Met Gln Phe Ser Ile Trp Ser Phe Thr Val Leu Gln Ile Ser Ala  
50 55 60

Pro Gly Ser His Leu Val Pro Glu Thr Glu Arg Ala Glu Gly Pro Gly  
65 70 75 80

Val Phe Val Glu His Asp Ile  
85

<210> 10  
<211> 49  
<212> PRT  
<213> Mus musculus

<400> 10

Met Ile Ser Thr Ser His Gly His Phe Gln Glu Met Gln Phe Ser Ile  
1 5 10 15

Trp Ser Phe Thr Val Leu Gln Ile Ser Ala Pro Gly Ser His Leu Val

20

25

30

Pro Glu Thr Glu Arg Ala Glu Gly Pro Gly Val Phe Val Glu His Asp  
 35 40 45

Ile

<210> 11  
 <211> 38  
 <212> PRT  
 <213> Mus musculus

&lt;400&gt; 11

Met Gln Phe Ser Ile Trp Ser Phe Thr Val Leu Gln Ile Ser Ala Pro  
 1 5 10 15

Gly Ser His Leu Val Pro Glu Thr Glu Arg Ala Glu Gly Pro Gly Val  
 20 25 30

Phe Val Glu His Asp Ile  
 35

<210> 12  
 <211> 21  
 <212> PRT  
 <213> Mus musculus

&lt;400&gt; 12

Met Trp Trp Gly Leu Ile Leu Ser Ala Ser Val Lys Phe Leu Gln Arg  
 1 5 10 15

Lys Glu Ile Leu Cys  
 20

<210> 13  
 <211> 14  
 <212> PRT  
 <213> Mus musculus

&lt;400&gt; 13

Met Val Gly Ala Asp Leu Cys Lys Gly Gly Trp His Cys Val  
 1 5 10

<210> 14  
 <211> 13  
 <212> PRT  
 <213> Mus musculus

<400> 14

Met Arg Glu Pro Val Lys Asn Leu Gln Gly Leu Val Ser  
1 5 10

<210> 15

<211> 25

<212> PRT

<213> Mus musculus

<400> 15

Met Glu Val Tyr Glu Leu Arg Val Thr Leu Met Glu Thr Gly Arg Glu  
1 5 10 15

Arg Ser His Phe Val Lys Thr Ser Leu  
20 25

<210> 16

<211> 15

<212> PRT

<213> Mus musculus

<400> 16

Met Glu Thr Gly Arg Glu Arg Ser His Phe Val Lys Thr Ser Leu  
1 5 10 15

<210> 17

<211> 30

<212> PRT

<213> Homo sapiens

<400> 17

Met Gly Leu Ser Ala Val Gly Arg Thr Arg Ala Glu Ser Gly Thr Ala  
1 5 10 15

Glu Arg Ala Ala Pro Val Phe Val Leu Gly Leu Gln Ala Val  
20 25 30

<210> 18

<211> 24

<212> PRT

<213> Homo sapiens

<400> 18

Met Leu Leu Trp Asp Pro Ser Gly Phe Gln Gln Ile Ser Ile Lys Lys  
1 5 10 15

Val Ile Ser Lys Thr Leu Pro Thr  
20

<210> 19  
<211> 26  
<212> PRT  
<213> Homo sapiens

<400> 19

Met Leu Pro Asn Thr Met Gly Gln Leu Val Glu Gly Gly His Met Lys  
1 5 10 15

Gln Val Leu Ser Lys Ala Val Leu Thr Val  
20 25

<210> 20  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 20

Met Gly Gln Leu Val Glu Gly Gly His Met Lys Gln Val Leu Ser Lys  
1 5 10 15

Ala Val Leu Thr Val  
20

<210> 21  
<211> 12  
<212> PRT  
<213> Homo sapiens

<400> 21

Met Lys Gln Val Leu Ser Lys Ala Val Leu Thr Val  
1 5 10

<210> 22  
<211> 4  
<212> PRT  
<213> Homo sapiens

<400> 22

Met Ser Glu Cys  
1

<210> 23  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 23

Met Ala His Phe Val Ala Val Gln Ile Thr Val

1 5 10

<210> 24  
<211> 6  
<212> PRT  
<213> Homo sapiens

<400> 24

Met Gly Ile Cys Tyr Ser  
1 5

<210> 25  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 25

Met Lys Arg Ala Gly Glu Gly Lys Ser Phe Cys Lys Gly Arg His Tyr  
1 5 10 15

Ser Val

<210> 26  
<211> 21  
<212> PRT  
<213> Homo sapiens

<400> 26

Met Leu Thr Thr Leu Ile Tyr Tyr Gln Gly Asn Ser Val Ile Phe Val  
1 5 10 15

Arg Gln His Ser Ala  
20

<210> 27  
<211> 37  
<212> PRT  
<213> Homo sapiens

<400> 27

Met Gln Leu Pro His Phe Val Ala Arg Leu Phe Pro His Glu Gln Phe  
1 5 10 15

Val Phe Ile Gln Gln Leu Ser Ser Leu Gly Lys Pro Phe Cys Arg Gly  
20 25 30

Val Cys His Ser Val  
35

<210> 28  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 28

Met Gly Phe Ser Lys Gly Arg Lys Cys Cys Gly  
1 5 10

<210> 29  
<211> 18  
<212> PRT  
<213> Homo sapiens

<400> 29

Met Lys Lys Ile Trp Leu Ser Arg Lys Val Phe Leu Tyr Trp Ala Glu  
1 5 10 15

Thr Leu

<210> 30  
<211> 34  
<212> PRT  
<213> Homo sapiens

<400> 30

Met Gly Lys Val His Val Met Pro Leu Leu Phe Met Glu Ser Lys Ala  
1 5 10 15

Ala Ser Ile Asn Gly Asn Ile Met Leu Val Tyr Val Glu Thr His Asn  
20 25 30

Thr Val

<210> 31  
<211> 28  
<212> PRT  
<213> Homo sapiens

<400> 31

Met Pro Leu Leu Phe Met Glu Ser Lys Ala Ala Ser Ile Asn Gly Asn  
1 5 10 15

Ile Met Leu Val Tyr Val Glu Thr His Asn Thr Val  
20 25



<210> 32  
<211> 23  
<212> PRT  
<213> Homo sapiens

<400> 32

Met Glu Ser Lys Ala Ala Ser Ile Asn Gly Asn Ile Met Leu Val Tyr  
1 5 10 15

Val Glu Thr His Asn Thr Val  
20

<210> 33  
<211> 11  
<212> PRT  
<213> Homo sapiens

<400> 33

Met Leu Val Tyr Val Glu Thr His Asn Thr Val  
1 5 10

<210> 34  
<211> 55  
<212> PRT  
<213> Homo sapiens

<400> 34

Met Glu Glu Gly Ser Phe Ile Tyr Thr Ile Lys Gly Pro Trp Met Thr  
1 5 10 15

His Ser Leu Cys Asp Cys Cys Val Ile Gly Phe Gln Thr Leu Ala Leu  
20 25 30

Ile Gly Ile Ile Gly Glu Gly Thr Trp Trp Leu Leu Gln Gly Val Phe  
35 40 45

Cys Leu Gly Arg Thr His Cys  
50 55

<210> 35  
<211> 41  
<212> PRT  
<213> Homo sapiens

<400> 35

Met Thr His Ser Leu Cys Asp Cys Cys Val Ile Gly Phe Gln Thr Leu  
1 5 10 15

Ala Leu Ile Gly Ile Ile Gly Glu Gly Thr Trp Trp Leu Leu Gln Gly  
20 25 30

Val Phe Cys Leu Gly Arg Thr His Cys  
35 40

<210> 36  
<211> 16  
<212> PRT  
<213> Homo sapiens

<400> 36

Met Glu Ser Gln Ala Thr Gly Phe Cys Tyr Glu Ala Ser His Ser Val  
1 5 10 15

<210> 37  
<211> 12  
<212> PRT  
<213> Mus musculus

<400> 37

Leu Ala Glu Pro Arg Gly Phe Val Cys Gly Val Glu  
1 5 10

<210> 38  
<211> 773  
<212> DNA  
<213> Mus musculus

<220>  
<221> Intron  
<222> (9)..(108)  
<223> intron 5 prime to J beta 2.6

<220>  
<221> misc\_feature  
<222> (109)..(773)  
<223> C beta 2 domain

<400> 38  
ttccctaaat gggagaatac ctgcgtgaac cccgcggggt tgtgtgtggg gttgagcctc 60  
tgtgctccta tgaacagtac ttcggtcccg gcaccaggct cacggtttta gaggatctga 120  
gaaatgtgac tccaccaag gtctccttgt ttgagccatc aaaagcagag attgcaaaca 180  
aacaaaaggc taccctcgtg tgcttggcca ggggcttctt ccctgaccac gtggagctga 240  
gctggtgggt gaatggcaag gaggtccaca gtgggggtcag cacggaccct caggcctaca 300  
aggagagcaa ttatagctac tgcctgagca gccgcctgag ggtctctgct accttctggc 360  
acaatcctcg aaaccacttc cgctgccaag tgcagttcca tgggctttca gaggaggaca 420

agtggccaga gggctcacc aaacctgtca cacagaacat cagtgcagag gcctggggcc 480  
 gagcagactg tggaatcact tcagcatcct atcatcaggg ggttctgtct gcaaccatcc 540  
 tctatgagat cctactgggg aaggccaccc tatatgctgt gctggtcagt ggccctgggtgc 600  
 tgatggccat ggtcaagaaa aaaaattcct gagacaaact tttatgcatc ctgagccggtt 660  
 cttcacctg gccatagatt ttctgcacc ttctctaatt cctgttccta agaacttgtc 720  
 tcttcttcct ccatggatat ccaccttcc tcgttgacac cttgactctg aaa 773

<210> 39  
 <211> 207  
 <212> PRT  
 <213> Mus musculus

<400> 39

Met	Gly	Glu	Tyr	Leu	Ala	Glu	Pro	Arg	Gly	Phe	Val	Cys	Gly	Val	Glu	1	5	10	15
Pro	Leu	Cys	Ser	Tyr	Glu	Gln	Tyr	Phe	Gly	Pro	Gly	Thr	Arg	Leu	Thr	20	25	30	
Val	Leu	Glu	Asp	Leu	Arg	Asn	Val	Thr	Pro	Pro	Lys	Val	Ser	Leu	Phe	35	40	45	
Glu	Pro	Ser	Lys	Ala	Glu	Ile	Ala	Asn	Lys	Gln	Lys	Ala	Thr	Leu	Val	50	55	60	
Cys	Leu	Ala	Arg	Gly	Phe	Phe	Pro	Asp	His	Val	Glu	Leu	Ser	Trp	Trp	65	70	75	80
Val	Asn	Gly	Lys	Glu	Val	His	Ser	Gly	Val	Ser	Thr	Asp	Pro	Gln	Ala	85	90	95	
Tyr	Lys	Glu	Ser	Asn	Tyr	Ser	Tyr	Cys	Leu	Ser	Ser	Arg	Leu	Arg	Val	100	105	110	
Ser	Ala	Thr	Phe	Trp	His	Asn	Pro	Arg	Asn	His	Phe	Arg	Cys	Gln	Val	115	120	125	
Gln	Phe	His	Gly	Leu	Ser	Glu	Glu	Asp	Lys	Trp	Pro	Glu	Gly	Ser	Pro	130	135	140	
Lys	Pro	Val	Thr	Gln	Asn	Ile	Ser	Ala	Glu	Ala	Trp	Gly	Arg	Ala	Asp	145	150	155	160

Cys Gly Ile Thr Ser Ala Ser Tyr His Gln Gly Val Leu Ser Ala Thr  
165 170 175

Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala Val Leu  
180 185 190

Val Ser Gly Leu Val Leu Met Ala Met Val Lys Lys Lys Asn Ser  
195 200 205

<210> 40  
<211> 129  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(129)  
<223> J beta 2.1 sequence

<400> 40

Lys Gly Ser Arg Glu Val Glu Pro Pro Phe Ser Pro Tyr His Val Asn  
1 5 10 15

His Gln Gln Ser Ile Arg Thr Cys Met Gly Asn Tyr Glu Leu Ile Lys  
20 25 30

Lys His Val Glu Lys Thr Leu Cys Gly Lys Glu Val Thr Ser Pro Phe  
35 40 45

Ser Leu Glu Ala Thr Trp Thr Pro Thr Gly Ser Leu Gln Ile Ser Asn  
50 55 60

Ser Leu Cys Gln Thr Leu Ser Glu Met Asp Ile Arg Ser Gln Ala Lys  
65 70 75 80

Ser Gly Ile Ser Ser Ser Ile Asp Arg Pro His Ala Arg Ser Arg Leu  
85 90 95

Pro Tyr Gln Phe Trp Arg Met Glu Asn Val Ser Asn Pro Gly Ser Cys  
100 105 110

Ile Glu Glu Gly Glu Glu Arg Gly Arg Ile Leu Gly Ser Pro Phe Leu  
115 120 125

Leu

<210> 41  
<211> 54  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(54)  
<223> J beta 2.6 sequence

<400> 41

Glu Leu Leu Gly Asn Cys Ser Gly Glu Phe Trp Gly Phe Trp Arg Leu  
1 5 10 15

Tyr Pro Glu Phe Pro Ser Arg Ala Leu Glu Arg Glu Ala Glu Gln Gly  
20 25 30

Asp Phe Pro Met Gly Glu Tyr Leu Ala Glu Pro Arg Gly Phe Val Cys  
35 40 45

Gly Val Glu Pro Leu Cys  
50

<210> 42  
<211> 340  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(340)  
<223> J alpha TA31 sequence

<400> 42

Val Ser Lys Lys Lys Lys Lys Lys Lys Ser Val Thr Ile Leu Asn Ser  
1 5 10 15

Glu Pro Ala Glu Gly Ala Ile Asn Ser Ser Leu Leu Gly Ser Leu Asp  
20 25 30

Pro Gly Asn Val Leu Glu His Cys Thr Gly Leu Leu Pro Ser Pro Lys  
35 40 45

Asp Asp Pro Cys Gln Asp Arg Ser Ser Phe Leu Trp Gly Gly Gly Gln  
50 55 60

Trp Ile Phe Ala Val Ile Val Phe Cys Leu Ala His Ser Pro Arg Leu  
65 70 75 80

Trp	Pro	Glu	Thr	Ser	Pro	Gln	Ser	Thr	Thr	Gln	Glu	Gln	Arg	Val	Lys	85	90	95
Gly	Leu	Asn	Gly	Glu	Arg	Asp	Ile	Gly	His	Val	Arg	Thr	Arg	Arg	Asn	100	105	110
Phe	Thr	Gln	Lys	Lys	Asn	Cys	His	Leu	Gly	Arg	Cys	Ser	Val	Ser	Met	115	120	125
Ala	Glu	Val	Thr	Pro	Pro	Pro	Cys	Pro	Arg	Leu	Val	Ser	Gln	Leu	Arg	130	135	140
His	Gly	His	Gln	Lys	Gly	Gly	Phe	Leu	Ser	Ser	Leu	Lys	Thr	Asn	Leu	145	150	155
Ala	Glu	Ser	His	Leu	Pro	Ser	Ser	Pro	Asn	Glu	Pro	Val	Val	Ser	Val	165	170	175
Asp	Ala	Leu	Gly	Ser	Val	Arg	Arg	Val	Phe	Ala	Val	Ala	Glu	Gly	Ser	180	185	190
Arg	Leu	Thr	Arg	Arg	Ala	Arg	Trp	Gly	Arg	Thr	Tyr	Arg	Gly	Trp	Thr	195	200	205
Glu	Ala	Ser	Pro	Cys	Leu	His	Ser	Ser	Cys	Ala	Ala	Ser	Ser	Cys	Gly	210	215	220
Phe	Thr	Gly	Gly	Arg	Gly	Gly	Trp	Gly	Arg	Gly	Ala	Ile	Pro	Lys	Ala	225	230	235
Val	Ala	Cys	Phe	Gly	Ile	Cys	Ser	Gly	Leu	Leu	Cys	Leu	Pro	Pro	Trp	245	250	255
Glu	Arg	Thr	His	Leu	Ala	Ser	Arg	Arg	Leu	Asp	Val	Ala	Gly	Gln	Glu	260	265	270
Asp	Thr	Gly	Val	Gly	Gly	Asn	Ser	Phe	Arg	Gly	Glu	Gly	Glu	Arg	Gly	275	280	285
Gly	Arg	Thr	Val	Val	Glu	Gly	Val	Thr	Gly	Gly	Ser	Met	Ser	Arg	Met	290	295	300
Ser	Glu	Val	Lys	Phe	Lys	Lys	Leu	Glu	Ile	Lys	Asn	Lys	Lys	Gln	Gly	305	310	315
																		320

Arg Gly Leu Gln Lys Val Tyr Arg Ala Gly Thr Val Asp Phe Val Met  
325 330 335

Ala Trp His Thr  
340

<210> 43  
<211> 253  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(253)  
<223> J alpha TA46 sequence

<400> 43

Val Phe Leu Pro Gly Arg Trp Glu Pro Lys Glu Val Asp Arg Asp Ile  
1 5 10 15

Ser Asn Pro Pro Cys Lys Pro Leu Val Leu Pro Thr Val Asp Thr Val  
20 25 30

Thr Ile Arg Thr Leu Ser His Ile Asp Glu Gly Ser Asp Val Val His  
35 40 45

Thr Glu Asp Ser Arg Asp Leu Ser Leu Val Thr Val Ser Asp Cys Met  
50 55 60

Pro Ile Val Val His Ser Arg Val Gln Gln Thr Lys Asp Arg Asp Ile  
65 70 75 80

Lys Ile Arg Trp Thr Leu Ser Pro His Leu Cys Asn Gln Met Ile Phe  
85 90 95

Thr Gly Ser Leu Ala Asn Gly Cys Val Ala Ser Leu Thr Ile Ser Pro  
100 105 110

Leu Leu Ser Pro Trp Leu Ser Phe Gly Ser Leu Ser Leu Thr Asn Leu  
115 120 125

Lys Ser Ile Tyr Ile Ile Arg Phe Leu Gly Cys Ile Thr His Lys Lys  
130 135 140

Met Thr Ser Arg His Ile Asn Ile Asn Pro Glu Glu Arg Gly Gln Arg  
145 150 155 160

Ala Leu Ser Gln Thr Cys Ser Glu Leu Asn Leu Thr Thr Pro Cys Phe  
165 170 175

Asn Gln Leu Ala Ser Ala Tyr Asp Gln Leu Arg Gln Arg Ala Thr Asp  
180 185 190

Arg Lys Trp Ser Ser Arg His His Leu Thr Arg Ala Leu Pro His Gln  
195 200 205

Arg Tyr Phe Arg Val Gln Glu Ser Phe Pro Gln Ala Gly Trp Leu Glu  
210 215 220

Arg Gly His Gly Ser Ala Leu Arg Gln Ala Met Glu Ala Gly Trp Glu  
225 230 235 240

Val Gln His Trp Val Ser Asp Met Glu Cys Leu Thr Val  
245 250

<210> 44  
<211> 310  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(310)  
<223> J alpha New05 sequence

<400> 44

Val Lys Asp Gly Tyr Pro Lys Thr Lys Val Cys Gly Phe Ala Val Leu  
1 5 10 15

Cys Ser Phe Gly Gly Cys Met Ser Leu Pro Pro Arg Ser Leu Cys Ile  
20 25 30

Thr Leu Met Gly Leu Cys Leu Met Lys Ser Gly His Ser Lys Asp Leu  
35 40 45

Asp Glu Glu Val Ile Ile Ile Thr Ala Phe Phe His Tyr Leu Arg Ile  
50 55 60

Arg Ser Ala Arg Phe Ile Asn Val Arg Leu Met Phe Val Leu Arg Tyr  
65 70 75 80

Lys Pro Asn Asn Ser Lys Ile Arg Leu Ser Ser Val Thr Thr His Ile  
85 90 95



His Thr His Ser His Thr His Ile Leu Thr His Trp His Asn His Thr  
100 105 110

His Thr His Thr Leu Ser Gln Ser His Thr His Thr His Ser His Thr  
115 120 125

Ser Thr Ile Thr His Thr Leu Thr Gln Pro His Thr His Ser Leu Ser  
130 135 140

Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser Leu Ser  
145 150 155 160

Leu Pro Arg Gln Cys Asn Cys Ile Trp Phe Pro Ser Arg Asn Gly Cys  
165 170 175

Cys Val Cys Leu Thr Asp Met Gln Ser Tyr Gln Leu Val Ser Trp Leu  
180 185 190

Gly Phe Cys Tyr Cys Phe Ser Val Lys Thr Leu Pro Val Lys Glu Ala  
195 200 205

Trp Cys Tyr Gln Pro Ser Cys His Tyr Ser Asn His Ile Tyr Thr Pro  
210 215 220

Phe Tyr Tyr Phe Ile Ser Leu Lys Leu Ala Gln Leu Ile Arg Ile Gln  
225 230 235 240

Cys Trp Gly Asn Lys Thr Ser Gly Phe Ser Ser Ser Glu Leu His Ser  
245 250 255

Gln Leu Leu Val Leu Arg Gly Cys Ser Lys Pro Ser Gln Thr Leu Gly  
260 265 270

Thr Lys Ala Ala Arg Arg Lys Ala Ser Thr Arg Gly Glu Asp Asp Val  
275 280 285

Ala Phe Leu Gly Leu Pro Leu Gly Pro Ser Cys Leu Leu Val Ile Val  
290 295 300

Arg Pro Gln Met Thr Val  
305 310

<210> 45  
<211> 688  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(688)  
<223> J alpha S 58 sequence

<400> 45

Trp Val Arg Phe His Val Thr Ala Val Ala Leu Cys Ser Phe Thr Ser  
1 5 10 15

Leu Leu His Leu Phe Leu Glu Thr Leu Gly Phe Arg Leu Ser Phe Leu  
20 25 30

Phe Lys Lys Gln Ser Leu Ser Lys Gln Asp Leu Leu Cys Leu Leu Ser  
35 40 45

Phe His Ile Val Thr Lys Ala Gly Arg Ile Cys Ser Lys Leu Gly Leu  
50 55 60

Arg Leu Leu Ala Lys Val Glu Trp Met Val Leu Val Tyr Arg Lys Glu  
65 70 75 80

Arg Phe Val Leu Leu Phe Phe Pro Tyr Ser Lys Val Lys Ala Thr Thr  
85 90 95

Val Ala Ser Lys Val Leu Gln Ala Trp Ser Val Leu Gln Gly Glu Thr  
100 105 110

Trp Gly Asn Trp Leu Thr Phe His Gly Lys Thr Gly Met Leu Phe Val  
115 120 125

Val Gly Leu Leu Leu Leu Leu Leu Ser Ser Leu Ser Leu Ser Leu Lys  
130 135 140

Glu Thr Tyr Asn Thr Phe Leu Ser Gly Phe Glu Leu Gly Ile Gln Met  
145 150 155 160

Cys Ile Thr Cys Ser Trp Gln Gly Ser Arg Ala Val Val Leu Asn Leu  
165 170 175

Pro Asn Val Val Ala Pro Ser Pro Pro Lys Thr Ile Lys Leu Phe Cys  
180 185 190

Cys Tyr Phe Ile Ala Val Thr Leu Leu Leu Leu Ile Gly Met Ile Ser  
195 200 205

Tyr Met Gln Leu Ile Tyr Ala Thr Pro Val Lys Gly Ser Leu Asn Pro

210						215						220				
Gln	Arg	Arg	Ser	Ala	Leu	Gln	Asp	Glu	Ser	Arg	Cys	Cys	Arg	Gly	Arg	
225					230					235					240	
Trp	Ser	Thr	Val	Ser	Asn	Val	Arg	Gly	Ala	Ile	Glu	Leu	Gly	Arg	Asn	
				245					250					255		
Thr	Met	Pro	Thr	Phe	Glu	Glu	Lys	Lys	Asn	Ser	Ser	Leu	Gly	Leu	Glu	
			260					265					270			
Gln	Asp	Pro	Leu	Phe	Leu	Val	Ser	Pro	Leu	Pro	Leu	Glu	Lys	Lys	Pro	
		275					280					285				
Phe	Ile	Cys	Asn	Gly	Leu	Ser	Arg	Leu	Met	Ser	Phe	Met	Arg	Phe	His	
	290					295					300					
Val	Leu	Thr	Asp	Ser	Leu	Gly	Arg	Arg	Ser	Leu	Leu	Pro	Leu	Gln	Val	
305					310					315					320	
Val	Phe	Asp	Val	Gly	Asn	Val	Asn	Cys	Thr	Ala	Lys	Ile	Arg	Arg	Ala	
				325					330					335		
Gly	Ile	Asn	Ser	Gln	Pro	Leu	Leu	Met	Leu	Ser	Leu	Asn	Arg	Asn	Gln	
			340					345					350			
Ile	Arg	Met	Leu	Ser	Ser	Val	Cys	Val	His	Thr	Pro	Pro	Arg	Ala	Ser	
		355					360					365				
Phe	Asp	Cys	Gln	Leu	Ile	Gln	Ile	Phe	Arg	His	Leu	Ser	Glu	Gln	Thr	
	370					375					380					
Ser	Leu	Gly	Ser	Leu	Cys	Leu	Asn	Leu	Ser	Arg	Tyr	Leu	His	Asn	Cys	
385					390					395					400	
Gln	Ile	Cys	Phe	Thr	Leu	Cys	Cys	Ile	Asp	Ser	Ala	Lys	Gln	Met	Arg	
				405					410					415		
Leu	Cys	Phe	Pro	Arg	Ser	Phe	Ser	Pro	Arg	Arg	Ser	Ser	Leu	Pro	Pro	
			420					425					430			
Ser	Lys	His	Leu	Phe	Thr	Gln	Arg	Glu	Asp	Val	Gln	Arg	Val	Thr	Leu	
		435					440					445				
Ile	Ala	Ala	Ala	Ser	Leu	His	Leu	Tyr	Asp	Ser	Leu	Pro	Trp	Lys	Arg	
450						455					460					

Leu Lys His Phe Ile Arg Leu Ile Ser Thr Asp Gln Pro Asn Glu Glu  
465 470 475 480

Arg Asn Arg Phe Ala Ser Phe Leu Trp Leu Gln Phe Gln Ala Thr His  
485 490 495

Leu Glu His Leu Val Arg His Leu Arg Asn Thr Gly Ala Arg Arg Glu  
500 505 510

Val Val Ser Leu Cys Gly Leu Val Phe Leu Ser Cys Thr Glu Asn Phe  
515 520 525

Thr Gln Glu Glu Glu Ser Lys Val Glu Asn Gln Pro Gly Ile His Met  
530 535 540

Tyr Thr Lys Gln Ser Ala Ser Ala Leu Ser Gly Ser Thr Val Trp Phe  
545 550 555 560

Pro His Ser Pro Thr Pro Ala Pro Phe Ile Ser Asn Thr Tyr Ile Ile  
565 570 575

Leu Phe Ser Phe Ser Phe Glu Phe Leu Ser Ala Met Pro Ser His Asn  
580 585 590

Pro Ser Thr Tyr His Cys Leu Ser Asn Pro Arg Met Asp Gly Ser Gly  
595 600 605

Thr Gly Arg Val Leu Phe Ser Gly Pro Ser Ala Glu Pro Leu Lys Lys  
610 615 620

Cys Arg Leu Tyr Pro Ser Ser Val Ala Thr Arg Arg Leu Gly Arg Gly  
625 630 635 640

Gln Asp Glu Glu Lys Pro Gln Glu Ser Gly Thr Ala Ser Leu Trp Tyr  
645 650 655

Ile Arg Leu Asn Leu Leu Ser Gly Leu Lys Cys Phe Ser Phe His Leu  
660 665 670

Glu Pro Met Cys Gly Ser Glu Glu Val Phe Val Val Glu Ser Ala Thr  
675 680 685

<210> 46  
<211> 275  
<212> PRT

<213> Mus musculus

<220>

<221> misc\_feature

<222> (1)..(275)

<223> J alpha New06 sequence

<400> 46

Lys Cys Val Phe Ser Cys Ser Leu Gly Leu Glu Gln Tyr Cys Ser Leu  
1 5 10 15

His Pro Gln Ile Phe Ser Arg Arg Ile Gln Cys Leu Ala Leu Gln Thr  
20 25 30

Leu Pro Val Pro Leu Lys Gly Ser Tyr Ser Phe Phe Lys His Arg Arg  
35 40 45

Ile Pro Phe Asn Val Ala Asn Cys Gly Gly Asp Thr Ala Gln Gly Pro  
50 55 60

Asn Leu Cys Ser Ser Leu Leu Gly Gln Leu Cys Leu Leu Ser His Arg  
65 70 75 80

Thr Ser Glu Ser Gly Gly Leu Phe Pro Ser Leu Ala Phe Pro Val Asp  
85 90 95

Glu Val Val Leu Ser Thr Asn Phe Ile Val Lys Asp Thr His Asp Arg  
100 105 110

Gln Leu Leu Pro Tyr Phe Ser Leu Asn Lys Phe Phe Leu Cys Leu Gln  
115 120 125

His Ile Ser Ala Asn Glu Phe Leu Val Ile Gln Ile Asn Ser Ser Val  
130 135 140

Thr Thr Val Ala Ser Tyr Pro Ile Ile Gln Asn Ser Leu Thr His His  
145 150 155 160

Ser Ala Ala Ala His Cys Ala Ser Ser Asn Pro Asp Leu His Ala Ser  
165 170 175

Ser Asn Lys Ala Lys Arg Met Ala Cys Tyr Gln Met Tyr Phe Thr Gly  
180 185 190

Arg Lys Val Asp Glu Pro Ser Glu Leu Gly Ser Gly Leu Glu Leu Ser  
195 200 205

Tyr Phe His Thr Gly Gly Ser Ser Gln Ala Val Gly Leu Phe Ile Glu  
210 215 220

Asn Met Ile Ser Thr Ser His Gly His Phe Gln Glu Met Gln Phe Ser  
225 230 235 240

Ile Trp Ser Phe Thr Val Leu Gln Ile Ser Ala Pro Gly Ser His Leu  
245 250 255

Val Pro Glu Thr Glu Arg Ala Glu Gly Pro Gly Val Phe Val Glu His  
260 265 270

Asp Ile Thr  
275

<210> 47  
<211> 556  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(556)  
<223> J alpha New08 sequence

<400> 47

Val Met Phe His Phe Leu Met Phe Asn Ser Leu Pro Leu Ser Arg Cys  
1 5 10 15

Ser Glu Cys Arg Val Gly Lys Leu His Met Leu Gly His Gly Gly Gln  
20 25 30

His Ser Cys Thr Gly Tyr Ser Thr Ala Gln Pro Asp Thr Thr Ser Pro  
35 40 45

Thr Thr Gly Glu Thr Ala Pro Thr Leu Pro Pro Asp Thr Lys Ile Phe  
50 55 60

Leu Ile Val Tyr Leu Ile Arg Ala Lys Gly Lys Ile Lys Lys Leu Cys  
65 70 75 80

Pro Glu Ser Ile Leu Lys Ser Pro Arg Pro Ser Pro Pro Tyr Pro His  
85 90 95

Ser Pro Ala Asp Cys Lys Phe Asn Val Ile Phe Gly Ser Tyr Lys Gly  
100 105 110

Phe	Leu	Cys	Leu	Met	Thr	Pro	Thr	Val	Ser	Leu	Pro	Ser	Phe	Ile	Lys	115	120	125	
Gly	Leu	Leu	Phe	Cys	Val	Trp	Pro	Leu	Leu	Ala	Ser	Trp	Phe	Cys	Pro	130	135	140	
His	Ala	Pro	Leu	Cys	Leu	Phe	Gln	Gly	Trp	Ala	Gly	Asp	Asn	Ser	Phe	145	150	155	160
Lys	Ser	His	Phe	Asp	Val	Thr	Asp	Asn	Arg	Asp	Lys	Val	Leu	Ala	Lys	165	170	175	
Cys	Asn	Thr	Ala	His	Gly	Val	Phe	Ser	Arg	His	Thr	Thr	Ser	Gln	Leu	180	185	190	
Phe	Ser	Ser	Val	Gln	Lys	His	Gly	His	Ser	Tyr	Leu	Met	Ser	Ala	Ile	195	200	205	
Tyr	Ser	Asp	Thr	Ala	Lys	Cys	Ser	Phe	Lys	Ala	Gly	Thr	Arg	Asp	Phe	210	215	220	
Leu	Trp	Asp	Leu	Phe	Leu	Arg	Leu	Thr	Met	Gly	Trp	Ala	Phe	Ser	Gly	225	230	235	240
Ser	Ser	Glu	Met	Pro	Ser	Trp	Ile	Pro	Ala	Leu	Pro	Met	Glu	Ile	Leu	245	250	255	
Trp	Ser	Gly	Thr	Ala	Lys	Pro	Asp	Met	Phe	Leu	Leu	Tyr	Arg	Leu	Leu	260	265	270	
Gln	Gly	Leu	Glu	Ile	Arg	Thr	Leu	Arg	Glu	Asn	Lys	Ser	Phe	Gly	Met	275	280	285	
Gly	Arg	Leu	Leu	Asp	Gly	Ser	Ile	Arg	Lys	Arg	Asn	Asp	Gln	Glu	Glu	290	295	300	
Arg	Pro	Lys	Lys	Asn	Thr	Gly	Gln	Ala	Leu	Gly	Trp	Gly	Gly	Val	Gly	305	310	315	320
Met	Ser	Arg	Lys	Met	Val	Thr	Val	Gly	Ile	Gln	Glu	Ala	Gly	Ser	Leu	325	330	335	
Ser	Glu	Gly	Lys	Gln	Gly	Phe	Leu	Leu	Lys	Val	Pro	Ser	Gln	Leu	Ser	340	345	350	

Asn Leu Asn Gln Gln Gly His Leu Pro Phe Pro Ser Asp Phe Pro Val  
355 360 365

His Val Gly Met Pro Leu Pro Pro Thr Met Val Cys Glu Val Gly Arg  
370 375 380

Gly Ile Asp Gln Glu Tyr Val His Ser Gly Pro Leu Phe Lys His Glu  
385 390 395 400

Thr Pro Glu Ser Val Arg Gly Ala Lys Ser Leu Gly Pro Arg Arg Glu  
405 410 415

Met Gln Gln Ser Asn Ser Ser Gln Gln Val Trp Arg Ser Thr Glu Gln  
420 425 430

Asp Pro Val Leu Ala Leu Cys Leu Thr Pro Leu Ala Ser Pro Asp His  
435 440 445

Thr Ala His Pro Ser Ser Phe Ser Pro Gln Glu Ser Lys Val Leu Asp  
450 455 460

Arg Glu Pro Glu Ile Pro Pro Gly Gln Val Gln Lys Gly Trp Ser Gly  
465 470 475 480

Ala Gln Gly Trp Phe Leu Lys Thr Leu Trp Ile Ser Ile Phe Leu Ile  
485 490 495

Tyr Asn Lys Phe Leu Ser Val Ile Arg Lys Met Phe Leu Leu Thr Ile  
500 505 510

Pro Val Lys Gly Lys Asp Asn Ile Tyr Arg Gly Pro Leu Leu Arg Cys  
515 520 525

Gln Phe Pro Pro Trp Ala Ser Met Trp Trp Gly Leu Ile Leu Ser Ala  
530 535 540

Ser Val Lys Phe Leu Gln Arg Lys Glu Ile Leu Cys  
545 550 555

<210> 48  
<211> 604  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(604)  
<223> J alpha LB2A sequence



<400> 48

Val Ile Val Thr His Pro Leu Cys Ile Pro Pro Thr Arg Ser Ile Phe  
1 5 10 15

Ala Leu Ser Ser Leu Leu Gly Ser Leu Ser Asn Val Val Ser Val Thr  
20 25 30

Pro Cys Pro Tyr Leu Leu Ser Arg Tyr Lys Trp Ser Lys Gln Ile Leu  
35 40 45

Gly Phe His His Ser Glu Thr Asp Asn Cys Val Leu Asp Ile Leu Gln  
50 55 60

Lys Glu Gly Phe Gln Ser Lys Gly Ser His Tyr Phe Tyr Leu Thr His  
65 70 75 80

Lys Glu Ala Gly Asp Asn Trp Lys Val Pro Gly Glu Tyr Leu Gly Phe  
85 90 95

Gln Lys Ala Asp Met Ala Gln Cys Met His Ser Lys Ile Pro Leu Thr  
100 105 110

Phe Ile Glu Tyr Leu Leu Tyr Ala Cys Val Asn Ala Pro Cys Thr Leu  
115 120 125

Ser His Leu Arg Gly Trp Leu Trp Gly Arg Phe Tyr Pro Thr Phe Lys  
130 135 140

Gly Lys Val Glu Ile Val Thr Lys Trp Leu Arg Glu Asn Gly Gly Pro  
145 150 155 160

Ser Thr Ser Ser Arg Pro Gly Cys Pro His Cys Gly Leu Ser Gln Pro  
165 170 175

Gly Ser Cys Gly Leu Tyr Arg Met Lys Pro Val Val Leu Val Thr Thr  
180 185 190

Ser Ser Val Leu Ser Gln Pro Cys Leu Glu Gln Gly Val Arg Asp Ser  
195 200 205

Leu Cys Phe Leu Asp Ser Asp Thr Leu Lys Gln Asn Gly Glu Cys Val  
210 215 220

His Glu Gln Phe His Ser Gly Ser Met Val Asn Gly Gln Thr Asn Leu

225		230		235		240									
Lys	Arg	Ser	Ser	Leu	Trp	Ser	Pro	Phe	Ser	Thr	Pro	Leu	Ser		
			245				250					255			
Ser	Leu	Pro	Thr	Phe	Leu	Ser	Ser	Trp	Thr	Phe	Ile	Ser	Gly	Lys	Pro
			260					265					270		
Leu	His	Arg	Cys	Leu	Cys	Arg	Ser	Gln	Ile	Lys	Asn	Glu	Arg	Leu	Ser
		275					280					285			
Pro	Gly	His	Thr	Lys	Asn	Leu	Arg	Arg	Leu	Phe	Phe	Gln	Tyr	Leu	Lys
	290					295					300				
Asn	Ser	Cys	Val	Asp	Asn	Gly	Arg	Gly	His	Gln	Arg	Gln	Asn	Gln	Lys
305					310					315					320
Gln	Met	Lys	Arg	Arg	Pro	Ser	Phe	Ser	Gly	Met	Leu	Leu	Asn	Gly	Ala
				325					330					335	
Val	Gly	Gly	Gln	Ala	Pro	Leu	Ser	Leu	Glu	Ser	Ala	Leu	Gln	Gly	Leu
			340					345					350		
His	Ser	Gly	Ser	Ser	Gly	Leu	Arg	Trp	Arg	Ala	Leu	Trp	Lys	Glu	Phe
		355					360					365			
Leu	Trp	His	Phe	Arg	Leu	Trp	Ile	Ser	Cys	Glu	Leu	Glu	Val	Leu	Arg
	370					375					380				
Pro	His	Asp	Pro	Ser	Ile	Glu	Asp	Lys	Arg	Val	Gly	Tyr	Ile	Cys	Phe
385					390					395					400
Phe	Leu	Phe	Leu	Leu	Phe	Pro	Arg	Asn	Arg	Pro	Ser	Asn	Cys	Ser	Gln
			405						410					415	
Ala	Glu	Ala	Tyr	Arg	Asp	Phe	Phe	Thr	Leu	Arg	Arg	Arg	Thr	Met	Ile
			420					425					430		
Ser	Gln	Cys	Ser	Lys	Trp	Gly	Lys	Lys	Arg	Arg	Glu	Arg	Glu	Arg	Glu
		435					440					445			
Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu	Arg	Glu
	450					455					460				
Met	Pro	Arg	Arg	Ala	Arg	Gly	Thr	Lys	Glu	Val	Gly	Leu	Cys	Arg	Gly
465					470					475					480

Gln Ile Ser Ile Glu Val Phe Ile Ser Ser Ala Leu Glu Asn Pro Ser  
485 490 495

Ile Met Val Leu Val Thr Glu Ala Val Phe Thr Gly Lys Gln Asp Gln  
500 505 510

Gly Ser Glu Gly Leu Pro Ile Thr Leu Ser Lys Gly Cys Val Ile Ala  
515 520 525

Phe Glu Arg Thr Leu Ala Val Glu Arg Leu Leu Leu Pro Gln Ile Ile  
530 535 540

Cys Leu Leu Arg Cys Ser Leu Arg Lys Ser Asp Cys Leu Pro Leu Leu  
545 550 555 560

Gly Ala Trp Gly Lys Asp Leu Gly Lys Leu Arg Ala Asp Arg Arg Ser  
565 570 575

Phe Ser Ala Leu His Ser Gln Ala Arg Glu Arg Gly Trp Gly Met Val  
580 585 590

Gly Ala Asp Leu Cys Lys Gly Gly Trp His Cys Val  
595 600

<210> 49  
<211> 385  
<212> PRT  
<213> Mus musculus  
  
<220>  
<221> misc\_feature  
<222> (1)..(385)  
<223> J alpha DK1 sequence

<400> 49

Val Cys Leu Phe Leu Trp Ile Pro Asn Leu Ile His Cys Asp Lys Cys  
1 5 10 15

Lys Leu Phe Arg His Val Ser Gly Val Ser Thr Val Pro Ile His Pro  
20 25 30

Asp Ile Thr Gly Ser Lys Val Pro Ser His Ala Phe Pro Val Leu Thr  
35 40 45

Arg Lys Thr Gly Ser Ser Leu Tyr Cys Trp Gln Ala Gln Gly Ser Arg  
50 55 60

Leu Glu Asp Ala Ser Asp Ala Gln Gln Pro Ala Trp Asp Cys Pro Gly  
65 70 75 80

Arg Glu Ser Cys Ser Glu Met Pro Ser Ser Leu Pro Leu Gly Ile Ile  
85 90 95

Leu Leu Ser Ser Pro Thr Ala Arg Pro Cys Leu Ser Val Ala Tyr Ser  
100 105 110

Ile Pro Ala Ser His Thr Cys Gly Cys Ala Asn Ile Leu Ile Glu Ala  
115 120 125

Ser Gly Arg Ser Gly Ser Ser Met Leu Leu Phe Gly Lys Ala Ser His  
130 135 140

Ser Lys Ala Gly Leu Asp Ser Pro Pro Pro Lys Ser Leu His Ile Pro  
145 150 155 160

Gly Ser Gly Leu Gln Val Gln Thr Thr Met Leu Val Phe Val Val Leu  
165 170 175

Asp Met Glu Pro Gly Cys Ala Cys Leu Gln Gly Lys His Phe Ile Gly  
180 185 190

Ala Ile Ser Leu Ala His Leu Pro Val Ser Ile Phe Phe Glu Arg Ile  
195 200 205

Ser Trp Tyr Ser His Leu Val His Arg Gln Lys Asp Asp Val Asp Val  
210 215 220

Pro Arg Trp His Thr Val Ile Trp Ser Gln Ala Leu Ile Phe Pro Pro  
225 230 235 240

Ser Ile Phe Arg Cys Leu Ser Val Lys Val Ile Ser Ser Ser Met Ser  
245 250 255

Pro Gly Gly Arg Leu Ala Cys Cys Pro Ser Ser Ala Val Ala Trp Met  
260 265 270

Ala Ser Ser Cys Tyr Pro Thr Leu Cys Ile Pro Ile Ile His Leu Thr  
275 280 285

Leu Tyr Val Tyr Leu Leu Phe Pro Tyr Ser Met Tyr Cys His Ala Thr  
290 295 300

Val Met Leu Phe Ile Val Ser Ser Val Ser Ser Val Val Pro Ile Thr  
305 310 315 320

Lys Ile Gln Arg Pro Asn Cys Leu Pro Cys Leu Lys Ile Ile Val Leu  
325 330 335

Glu Lys Lys Leu Glu Phe Cys Cys Cys Leu Tyr Arg His Glu Leu Arg  
340 345 350

Ser Leu Ala Val Ala Arg Thr Gly Tyr Asp Phe Cys Ser Val Leu His  
355 360 365

Thr Pro Val Met Arg Glu Pro Val Lys Asn Leu Gln Gly Leu Val Ser  
370 375 380

Leu  
385

<210> 50  
<211> 399  
<212> PRT  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(399)  
<223> J alpha TA39 sequence

<400> 50

Val Pro Asp Ser Trp Leu Arg Pro Pro Leu Ser His Ser Leu Tyr His  
1 5 10 15

Thr Asp Asp His Met Pro Tyr His Ser Ser Lys Val Glu Leu Gly Phe  
20 25 30

Asn Glu Glu Arg Asn Met Leu Leu Val Val Ala Val Leu His Pro Met  
35 40 45

Ser His Ser Met Phe Ile Ile Thr Leu Ile Thr Ser Ser Asp Lys Arg  
50 55 60

Lys Phe Thr Arg Arg Thr Val Thr Ile Cys Thr Leu Val Lys Met Lys  
65 70 75 80

Val Ser Thr Gly Ala Gly Ala Tyr Cys Asn Ser Gly Tyr Gln Lys Asp  
85 90 95

Gln Ala Leu Ala Arg Lys Lys Leu Asn Lys Val Asp Leu Val Lys Leu  
100 105 110

Leu Gln Ile Phe Phe Lys Asn Gln Tyr Val Ser Glu Leu Thr Gly Glu  
115 120 125

Tyr Ser Ala Ala Ile Leu Ser Gly Phe Ser Tyr Ser Tyr Gly Thr Thr  
130 135 140

Val Val Glu Pro Cys Lys Arg Gly Phe His Gly Leu Asn Ser Met Leu  
145 150 155 160

Ser Leu Tyr Ser Ser Asn Gln Lys Gly Gly Ile Pro Ser Arg Thr Pro  
165 170 175

Lys Arg Glu Glu Ser Met Leu Ile Thr Ser Ile Asp His Ser Arg Leu  
180 185 190

Ser Ile Phe Val Arg Gln His Gly Thr Thr Ile Tyr Asn Val Phe Ile  
195 200 205

Trp Gly Thr Arg His His Arg Asp Ala Gly Cys Asp Pro Leu Asn Leu  
210 215 220

Pro Gln Tyr Leu Gly Thr Val Val Lys Glu Leu Met Val His Ala Asp  
225 230 235 240

Lys His Ile Pro Cys Met Gly Lys Leu Ser Lys Gly Cys Arg Thr Gly  
245 250 255

Cys Glu Gln Asp Arg Ser Cys Arg Asn Pro Arg Asn Asn Ser Ser Arg  
260 265 270

Arg Ala Asp Pro Glu Glu Arg Ala Ala Gln Leu Lys His Ile Gln Val  
275 280 285

Pro Ile Cys Phe Asp Ser Cys Thr Gly Pro Ala Leu Ser Val Lys Arg  
290 295 300

Lys Cys Leu Ile Ile Leu His Lys Leu Ile Gly Val Asn Val Cys Lys  
305 310 315 320

Asn Ile Leu Gln Ile Leu Lys Cys Tyr Pro His Ile Lys Tyr Gly Ser  
325 330 335

Ile Lys Gln Gln Lys Ile Leu Lys Leu Gly Gln Ser Thr Leu Leu Arg  
340 345 350

Arg Asp Gly Val Cys Ser Cys Gly Ser Val Ala Thr Gly Thr Gly Lys  
355 360 365

His Pro Leu Ser Leu Met Glu Val Tyr Glu Leu Arg Val Thr Leu Met  
370 375 380

Glu Thr Gly Arg Glu Arg Ser His Phe Val Lys Thr Ser Leu Thr  
385 390 395

<210> 51

<211> 225

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(225)

<223> J beta 2.3 (bases 198551 to 198627), containing [SEQ ID NO:17]

<400> 51

Met Gly Leu Ser Ala Val Gly Arg Thr Arg Ala Glu Ser Gly Thr Ala  
1 5 10 15

Glu Arg Ala Ala Pro Val Phe Val Leu Gly Leu Gln Ala Val Ser Thr  
20 25 30

Asp Thr Gln Tyr Phe Gly Pro Gly Thr Arg Leu Thr Val Leu Glu Asp  
35 40 45

Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser Glu  
50 55 60

Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala Thr  
65 70 75 80

Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp Trp Val Asn Gly Lys  
85 90 95

Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln  
100 105 110

Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val  
115 120 125

Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln Val  
130 135 140

Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp Arg Ala  
145 150 155 160

Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly Arg Ala Asp  
165 170 175

Cys Gly Phe Thr Ser Glu Ser Tyr Gln Gln Gly Val Leu Ser Ala Thr  
180 185 190

Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala Val Leu  
195 200 205

Val Ser Ala Leu Val Leu Met Ala Met Val Lys Arg Lys Asp Ser Arg  
210 215 220

Gly  
225

<210> 52  
<211> 39  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(39)  
<223> J alpha 2 (bases 84269 to 84334)

<400> 52

Leu Leu Phe Lys Val Gly Pro Val Ser Leu Cys Asn Gly Val Thr Tyr  
1 5 10 15

Gly Met Asn Thr Gly Gly Thr Ile Asp Lys Leu Thr Phe Gly Lys Gly  
20 25 30

Thr His Val Phe Ile Ile Ser  
35

<210> 53  
<211> 142  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(142)



<223> J alpha 3 (83376. To 83437), containing [SEQ ID NO:18]

<400> 53

Leu Gln Gly Ile Glu Ala Ala Met Arg Glu Ala His Arg Pro Gly Glu  
1 5 10 15

Asn Leu Gly Ser Thr Leu Thr Gly Cys Phe Gln Ser Leu His Phe Leu  
20 25 30

Ser Ser Lys Met Thr Ile Thr Thr Ser Tyr Glu Ile Met Ala Arg Met  
35 40 45

Lys Val Ile Asn Lys Leu Phe Asn Ile Ile Ile Ile Ile Ile Glu  
50 55 60

Ala Leu Leu Ile Leu Arg Phe Thr Leu Ser Arg Glu Arg Arg Ile Ala  
65 70 75 80

Ser Leu Gly Asn Lys Arg Cys Lys Gln Gln Arg Pro Lys Glu Pro Phe  
85 90 95

Arg Met Leu Leu Trp Asp Pro Ser Gly Phe Gln Gln Ile Ser Ile Lys  
100 105 110

Lys Val Ile Ser Lys Thr Leu Pro Thr Val Gly Val Gln Gln Cys Phe  
115 120 125

Gln Asp Asn Leu Trp Ile Arg Asp Gln Thr Gln His Pro Ala  
130 135 140

<210> 54

<211> 162

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(162)

<223> J alpha 6 (79270 to 79331), containing [SEQ ID NO:19], [SEQ ID NO  
:20], [SEQ ID NO: 21]

<400> 54

Gln Leu Gln Glu Lys Arg His Ile Lys Phe Pro Leu Leu Ser Val Leu  
1 5 10 15

Ala Ala Leu Ser Glu Ala Pro Cys Ile Leu Lys Ser Ser Arg Ala Arg  
20 25 30

Pro Ser Glu Cys Leu Pro Gln Ala Ser Arg Val Trp Cys Leu Tyr Trp  
35 40 45

Gly Ala Gly Ser Arg His Gly Glu Leu Leu Pro Cys Phe Ser Ala Asp  
50 55 60

Gly Lys Val Val Phe Ser Pro Gly Tyr Thr Gly Ala Lys Glu Leu Ser  
65 70 75 80

Ser Pro Gln Pro Leu Ala Pro Ala Pro Gly Leu Gln His Ser Gly Ala  
85 90 95

Leu Arg Thr Ala Val Gly Asp Phe Leu Gln Leu Arg Glu Tyr Ser Gly  
100 105 110

Gly Phe Pro Arg Met Leu Pro Asn Thr Met Gly Gln Leu Val Glu Gly  
115 120 125

Gly His Met Lys Gln Val Leu Ser Lys Ala Val Leu Thr Val Cys Ile  
130 135 140

Arg Arg Lys Leu His Thr Tyr Ile Trp Lys Arg Asn Gln Pro Tyr Cys  
145 150 155 160

Ser Ser

<210> 55  
<211> 133  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(133)  
<223> J alpha 8 (76346 to 76405), containing [SEQ ID NO:22]

<400> 55

Ser Ile His Gly His His Ser Cys Lys Lys His Val Leu Thr Asn Ser  
1 5 10 15

Val Trp Met Val Lys Leu Pro Val Leu Ser Arg Thr Glu Thr Leu Leu  
20 25 30

Tyr Leu Phe Leu Glu Tyr His Phe Tyr Ile Thr Gln Gly Ile Gln Ser  
35 40 45

Arg Ile Phe Ser Trp Val Leu Ser Asp Leu Leu Ser Ser Ser Asn Gly  
50 55 60

Leu Arg Lys Ile Lys Val Lys Asp Met Pro Pro Thr Thr Leu Val His  
65 70 75 80

Ala Cys Arg His Arg Asn Thr Leu Ser Asn Leu Ala Cys Asp Leu Ala  
85 90 95

Ile Leu Ala Met Ala Gln Gln Gly Pro Ile Leu Tyr Arg Val Met Ser  
100 105 110

Glu Cys Glu His Arg Leu Ser Glu Thr Cys Ile Trp Asn Trp His Pro  
115 120 125

Thr Ser Gly Gln Ser  
130

<210> 56  
<211> 158  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(158)  
<223> J alpha 9 (75756 to 75816), containing [SEQ ID NO:23]

<400> 56

Gln Tyr Asn Ser Thr Arg Ala Leu Leu Cys Glu Leu Arg Asn Ala Gly  
1 5 10 15

Arg His Phe Ala His Arg Thr Leu Ala Leu Arg Asp Ser Leu Lys Ile  
20 25 30

Ser Ser Ser Pro Leu Phe Ile Phe Pro Ile Arg Lys Leu Arg Pro Arg  
35 40 45

Glu Val Gly Ile Val Gly Gln Cys Glu Leu Gly Leu Gly Leu Glu Pro  
50 55 60

Gly Asp Pro Gly Pro Gly Ala Ile Phe Cys Asp Cys Cys Leu Val Asn  
65 70 75 80

Thr Ser Asp Arg Glu Val Val Met Leu Ile Asn Arg Lys Asn Lys Val  
85 90 95

Leu Gln Gly Glu Tyr Lys Asn Val Leu Leu Ile Thr Ser Thr Leu Val  
100 105 110

Ala Pro Thr Cys Ser Pro Ala Val Val Lys Trp Lys Glu Lys Glu Met  
115 120 125

Ala His Phe Val Ala Val Gln Ile Thr Val Gly Asn Thr Gly Gly Phe  
130 135 140

Lys Thr Ile Phe Gly Ala Gly Thr Arg Leu Phe Val Lys Ala  
145 150 155

<210> 57  
<211> 168  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(168)  
<223> J alpha 11(72705 to 72765), containing [SEQ ID NO:24]

<400> 57

Val Asn Ser Gly Tyr Ser Thr Leu Thr Phe Gly Lys Gly Thr Met Leu  
1 5 10 15

Leu Val Ser Pro Glu His Cys Tyr Ser Ser Asp Val Trp Phe Gln Lys  
20 25 30

Asn Pro Asn Ile Ala Val Ile Pro Leu Lys Glu Gln Gly Arg Gly Phe  
35 40 45

Phe Ser Glu Ser Ser Ser Asp Leu Ser Ile Leu Cys Gln Ser Val Leu  
50 55 60

Trp Ile Gln Asp Thr Tyr Ile Phe Val Ser Ser Ala Gly Pro Thr Cys  
65 70 75 80

Ser Ala Ser Asp His Leu Ser Leu Ile Cys Lys Met Arg Ile Ile Phe  
85 90 95

Lys Leu Met Ala Gln Leu Lys Pro Lys Gly Ser Gly Ile Tyr Ala Asp  
100 105 110

Tyr Ser Ile Trp Leu Ile Asn Glu Gly Phe Leu Ser Phe Ser Leu Cys  
115 120 125

Arg Ser Trp Val Glu Ile Pro Asn Thr Ala Asn His Phe Cys Met Gly  
130 135 140

Ile Cys Tyr Ser Val Asn Ser Gly Tyr Ser Thr Leu Thr Phe Gly Lys  
145 150 155 160

Gly Thr Met Leu Leu Val Ser Pro  
165

<210> 58  
<211> 170  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(170)  
<223> J alpha 13 (71282 to 71342), containing [SEQ ID NO:25]

<400> 58

Asp Lys Ile Leu Glu Ser Ser Arg Lys Arg Gln Lys Val Trp Leu Ser  
1 5 10 15

Thr Ser Ser Ser Ser Asp Leu Ala Leu Val Asn Leu Gly His Ser Ile  
20 25 30

Phe Ile Tyr Lys Met Lys Thr Phe Asn Ile Thr Ser Asp Phe Leu Phe  
35 40 45

Phe Cys Gly Tyr Ile Ile Gly Val Tyr Ile Tyr Phe Lys Asp Lys Leu  
50 55 60

Ile Tyr Val Lys Val Phe Cys Lys Phe Leu Asn Ala Ile His Ser Glu  
65 70 75 80

Asn Ile Ile Cys Leu Asn Lys Lys Asn Tyr Val Arg Phe Arg Ile Leu  
85 90 95

Leu Thr Glu Phe Val Gly Ser Asn Ser His Leu His Val Ile Cys Ser  
100 105 110

Pro Arg His Trp Lys Ala Leu Ser Leu Leu Leu Lys Tyr Ser Gly Ser  
115 120 125

Asn Ala Thr Gln Met Lys Arg Ala Gly Glu Gly Lys Ser Phe Cys Lys  
130 135 140

Gly Arg His Tyr Ser Val Asn Ser Gly Gly Tyr Gln Lys Val Thr Phe  
145 150 155 160

Gly Ile Gly Thr Lys Leu Gln Val Ile Pro  
165 170

<210> 59  
<211> 163  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(163)  
<223> J alpha 14 (70532 to 70583), containing [SEQ ID NO:26]

<400> 59

Ser Tyr Ser Met Leu Leu Lys Lys Phe Leu Ile Glu Glu Arg Lys Ile  
1 5 10 15

Ile Tyr Lys Asp Met Ser Asn Leu Leu Asn Ser Gly Lys Met Arg Leu  
20 25 30

Cys Thr Gly Val Asp Ser Val Lys Met Gly Val Arg Ala Ala Ile Leu  
35 40 45

Trp Leu Val Lys Gln Asp Tyr Leu Val Lys Leu Cys Lys Ser Pro Arg  
50 55 60

Lys Lys Val Ser Glu Leu Ser Arg Glu Tyr His Leu Asp Cys Ser Gln  
65 70 75 80

Ala Phe His Tyr Ile Tyr Cys Thr Thr Met Val Pro Lys Glu Ala Phe  
85 90 95

Ser Gly Leu Ile Pro Trp Leu Ser Leu Tyr Ser Ser Ile Lys Lys Gly  
100 105 110

Glu Ser Ser Gln Ser Ser His Glu Gly Asp Ser Cys Met Leu Thr Thr  
115 120 125

Leu Ile Tyr Tyr Gln Gly Asn Ser Val Ile Phe Val Arg Gln His Ser  
130 135 140

Ala Val Ile Tyr Ser Thr Phe Ile Phe Gly Ser Gly Thr Arg Leu Ser  
145 150 155 160

Val Lys Pro

<210> 60  
<211> 142  
<212> PRT  
<213> Homo sapiens  
  
<220>  
<221> misc\_feature  
<222> (1)..(142)  
<223> J alpha 24 (60203 to 60265), containing [SEQ ID NO:27]

<400> 60

Lys Thr Ser Ser Tyr Leu Asn Asp Arg Ala Thr Val Val Ile Ser Cys  
1 5 10 15

His Leu Ser Ser Ala Glu Asp Trp Val Pro Val Asn Ala Ala Gly Gly  
20 25 30

Phe Leu Ser Leu Gln His Leu Lys Arg Thr Pro Arg Leu His Pro Gln  
35 40 45

Gln Ser Gly Phe Leu Pro Leu Pro Pro Gly Arg Cys Ser Ser Trp His  
50 55 60

Thr Pro Ser Leu Val Ser Lys Lys Arg Asn Lys Arg Lys Gly Glu Lys  
65 70 75 80

Leu Ile Ser His Ile Met Gln Leu Pro His Phe Val Ala Arg Leu Phe  
85 90 95

Pro His Glu Gln Phe Val Phe Ile Gln Gln Leu Ser Ser Leu Gly Lys  
100 105 110

Pro Phe Cys Arg Gly Val Cys His Ser Val Thr Thr Asp Ser Trp Gly  
115 120 125

Lys Leu Gln Phe Gly Ala Gly Thr Gln Val Val Val Thr Pro  
130 135 140

<210> 61  
<211> 176  
<212> PRT  
<213> Homo sapiens

<220>

<221> misc\_feature  
<222> (1)..(176)  
<223> J alpha 25 (59046 to 59105)

<400> 61

Gln Lys Asp Lys Ala Ser Pro Leu Ser Leu Gly Arg Gly Gln Gly Cys  
1 5 10 15

Leu Ser Ser Gln Ala Gln Ala Gly Gly Arg Lys Leu Gly Val Phe Ala  
20 25 30

Glu Pro Arg Asn Thr Val Gly Ile Thr Met Val Arg Ile Leu Ser Leu  
35 40 45

Val Pro Glu Pro Asp Cys Pro Cys Cys Pro Val Ser Thr Val Lys Trp  
50 55 60

Arg Lys Met Ser Pro Val Leu Asp Val Gly Arg Ser Cys Arg Val Leu  
65 70 75 80

Arg Pro Gly Val His Arg Asp Leu Arg Ser Gly Asp Gly Glu Glu Gly  
85 90 95

Lys Arg Asn Glu Lys Gln Asn His Lys Asp Asn Thr Glu Glu Gly Phe  
100 105 110

Ile Phe Gly Lys Glu Asn His Lys Ala Val Leu Thr Leu Glu Glu Met  
115 120 125

His Ser Phe Gly Gly Ser Leu Leu Arg Arg Ala Leu Cys Arg Gly Lys  
130 135 140

Leu Ser Cys Val Phe Asp Ala Glu Ile Ile Thr Met Gln Lys Asp Lys  
145 150 155 160

Ala Ser Pro Leu Ser Leu Gly Arg Gly Gln Gly Cys Leu Ser Ser Gln  
165 170 175

<210> 62  
<211> 141  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(141)  
<223> J alpha 31 (51207 to 51263), containing [SEQ ID NO:28]



<400> 62

Glu Leu Gly Trp Leu Cys Ser Trp Lys Ile Ser Leu Trp Val Glu Cys  
1 5 10 15

Thr Val Pro Ser Asn Leu Cys Val Gly Ala His Thr Tyr Asp Ser Lys  
20 25 30

Ser Cys Gln Ile Arg Phe Ser Phe Gly Ser Phe Met Pro Arg Asn Ala  
35 40 45

Lys Glu Phe Lys Leu Ile Ser Leu Ala Phe Leu Lys Glu Thr Leu Phe  
50 55 60

Ala Leu Cys Cys Arg Ala Asn Phe Ser Ser Tyr His Lys Arg Pro Glu  
65 70 75 80

Thr Gln Arg Lys Gln Lys Lys Lys Arg Lys Lys Lys Lys Thr Gln Gly  
85 90 95

Glu Ser Asn Cys Pro Leu Thr Thr Val Leu Cys Val Trp Gly Phe Thr  
100 105 110

Met Gly Phe Ser Lys Gly Arg Lys Cys Cys Gly Asn Asn Asn Ala Arg  
115 120 125

Leu Met Phe Gly Asp Gly Thr Gln Leu Val Val Lys Pro  
130 135 140

<210> 63

<211> 148

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(148)

<223> J alpha 36 (45351 to 45411), containing [SEQ ID NO:29]

<400> 63

Lys Leu Gly Ala Val Ser Leu Thr Cys Asn Leu Ser Ile Leu Glu Gly  
1 5 10 15

Gly Arg Arg Ile Thr Gly Gln Glu Phe Lys Thr Thr Leu Gly Asn Thr  
20 25 30

Val Arg Pro Pro Ser Leu Gln Lys Ile Asn Lys Asn Phe Phe Lys Asn

35

40

45

Ser Gln Ala Trp His Ala Pro Val Ile Leu Ala Thr Glu Glu Val Glu  
50 55 60

Ala Gly Gly Ser Leu Val Pro Arg Arg Ser Arg Leu Gln Ala Lys Asn  
65 70 75 80

Thr Pro Leu His Ser Ser Leu Asp Asn Lys Val Arg Ser Cys Leu Lys  
85 90 95

Tyr Ile Phe Lys Asn Ile Lys Ile Ser Arg Arg Arg Lys Glu Met Lys  
100 105 110

Lys Ile Trp Leu Ser Arg Lys Val Phe Leu Tyr Trp Ala Glu Thr Leu  
115 120 125

Cys Gln Thr Gly Ala Asn Asn Leu Phe Phe Gly Thr Gly Thr Arg Leu  
130 135 140

Thr Val Ile Pro  
145

<210> 64  
<211> 144  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(144)  
<223> J alpha 40 (39930 to 39990), containing [SEQ ID NO:30], [SEQ ID N  
O:31], [SEQ ID NO:32], [SEQ ID NO:33]

<400> 64

Asn Tyr Lys Ile Met Ser Trp Val Cys Leu Cys Gly Ser Thr Gly Ser  
1 5 10 15

Arg Gly Glu Ser Met Glu Tyr Phe Arg Gly Phe Asn Ser His Leu Asp  
20 25 30

Ala Val Leu Ile Cys Ser Leu Asn Gln Thr Leu Leu Ile Asn Met His  
35 40 45

Lys Asp Ser Met Arg Leu Lys Asn Phe Cys Lys Leu Gly Pro Asn Arg  
50 55 60

Ser Ser Glu Asp Phe Leu Tyr Glu Leu Arg Tyr Asn Pro Lys Ile Thr  
65 70 75 80

Cys Arg Lys Ile Arg Gly Gln Gly Leu Ser Met Gly Lys Val His Val  
85 90 95

Met Pro Leu Leu Phe Met Glu Ser Lys Ala Ala Ser Ile Asn Gly Asn  
100 105 110

Ile Met Leu Val Tyr Val Glu Thr His Asn Thr Val Thr Thr Ser Gly  
115 120 125

Thr Tyr Lys Tyr Ile Phe Gly Thr Gly Thr Arg Leu Lys Val Leu Ala  
130 135 140

<210> 65

<211> 152

<212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<222> (1)..(152)

<223> J alpha 41 (37899 to 37961), containing [SEQ ID NO:34], [SEQ ID N  
O:35]

<400> 65

Gln Leu Leu Ser Leu Tyr Leu Pro Pro Thr Phe Thr Leu Glu Pro His  
1 5 10 15

Arg Ile Val Ser Val His Ala Pro Gly Cys Ser Gln Ser Arg Pro Ala  
20 25 30

Arg Arg Ser Ala Gly His Arg Lys Thr Pro Asp Phe Ile Thr Cys His  
35 40 45

Arg Ala Pro Ser Leu Arg Trp Gln Ile Ser Ile Leu Ile Thr His Ile  
50 55 60

Thr Val Gly Ser Gly Asp Leu Val Ser Asn Gly Leu Met Glu Glu Gly  
65 70 75 80

Ser Phe Ile Tyr Thr Ile Lys Gly Pro Trp Met Thr His Ser Leu Cys  
85 90 95

Asp Cys Cys Val Ile Gly Phe Gln Thr Leu Ala Leu Ile Gly Ile Ile  
100 105 110

Gly Glu Gly Thr Trp Trp Leu Leu Gln Gly Val Phe Cys Leu Gly Arg  
115 120 125

Thr His Cys Gly Thr Gln Ile Pro Gly Met His Ser Thr Ser Ala Lys  
130 135 140

Ala Pro Arg Cys Trp Ser His Pro  
145 150

<210> 66  
<211> 141  
<212> PRT  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(141)  
<223> J alpha 44 (35064 to 35126), containing [SEQ ID NO:36]

<400> 66

Leu Gly Pro Ile Thr His Gln Val Gln Glu Gly Phe Ile Lys Ile Lys  
1 5 10 15

Pro Arg Asn Arg Lys Asp Lys Glu Phe Asn Ser Gln Cys Leu Gln Ser  
20 25 30

Thr Gln Leu Leu Ser Leu Asn His Leu Val Ser Thr Pro Pro Thr Glu  
35 40 45

Val Lys Glu Gly Asn Gln Gln Val Met Leu Val Lys Val Ser Gly Gln  
50 55 60

Ser Gln Leu Pro Ser Glu Leu Ile Leu Trp Ser Leu Gly Lys Gly Asn  
65 70 75 80

Ala Ser Val Arg Ala His Pro Gly Cys Pro Ser Gly Arg Asp His Gly  
85 90 95

Glu Ser Ser Glu Gly Ser Glu His Gln Met Glu Ser Gln Ala Thr Gly  
100 105 110

Phe Cys Tyr Glu Ala Ser His Ser Val Asn Thr Gly Thr Ala Ser Lys  
115 120 125

Leu Thr Phe Gly Thr Gly Thr Arg Leu Gln Val Thr Leu  
130 135 140

<210> 67  
 <211> 678  
 <212> DNA  
 <213> Homo sapiens

<220>  
 <221> Intron  
 <222> (1)..(90)  
 <223> intron 5 prime to J beta 2.3

<220>  
 <221> misc\_feature  
 <222> (93)..(138)  
 <223> J beta 2.3 sequence

<220>  
 <221> misc\_feature  
 <222> (139)..(678)  
 <223> C beta 2 domain

<400> 67  
 atggggctct cagcgggtggg aaggacccga gctgagtctg ggacagcaga gcggggcagca 60  
 ccgggtttttg tcctgggcct ccaggctgtg agcacagata cgcagtatTT tggcccaggc 120  
 acccggctga cagtgtctga ggacctgaaa aacgtgttcc cacccgaggt cgctgtgttt 180  
 gagccatcag aagcagagat ctccacacacc caaaaggcca cactgggtgtg cctggccaca 240  
 ggcttctacc ccgaccacgt ggagctgagc tggtgggtga atgggaagga ggtgcacagt 300  
 ggggtcagca cagacccgca gccctcaag gagcagcccg ccctcaatga ctccagatac 360  
 tgcttgagca gccgcctgag ggtctcggcc accttctggc agaacccccg caaccacttc 420  
 cgctgtcaag tccagttcta cgggctctcg gagaatgacg agtggacca ggatagggcc 480  
 aaaccgtca ccagatcgt cagcgccgag gcctggggta gagcagactg tggcttcacc 540  
 tccgagtctt accagcaagg ggtcctgtct gccaccatcc tctatgagat cttgctaggg 600  
 aaggccacct tgtatgccgt gctggtcagt gccctcgtgc tgatggccat ggtcaagaga 660  
 aaggattcca gaggctag 678

<210> 68  
 <211> 225  
 <212> PRT  
 <213> Homo sapiens

<400> 68

Met Gly Leu Ser Ala Val Gly Arg Thr Arg Ala Glu Ser Gly Thr Ala  
 1 5 10 15

Glu Arg Ala Ala Pro Val Phe Val Leu Gly Leu Gln Ala Val Ser Thr  
20 25 30

Asp Thr Gln Tyr Phe Gly Pro Gly Thr Arg Leu Thr Val Leu Glu Asp  
35 40 45

Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val Phe Glu Pro Ser Glu  
50 55 60

Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val Cys Leu Ala Thr  
65 70 75 80

Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp Trp Val Asn Gly Lys  
85 90 95

Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro Leu Lys Glu Gln  
100 105 110

Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser Arg Leu Arg Val  
115 120 125

Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe Arg Cys Gln Val  
130 135 140

Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr Gln Asp Arg Ala  
145 150 155 160

Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp Gly Arg Ala Asp  
165 170 175

Cys Gly Phe Thr Ser Glu Ser Tyr Gln Gln Gly Val Leu Ser Ala Thr  
180 185 190

Ile Leu Tyr Glu Ile Leu Leu Gly Lys Ala Thr Leu Tyr Ala Val Leu  
195 200 205

Val Ser Ala Leu Val Leu Met Ala Met Val Lys Arg Lys Asp Ser Arg  
210 215 220

Gly  
225

<210> 69  
<211> 20  
<212> DNA  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(20)  
<223> exonic J beta 2.6 primer

<400> 69  
ctatgaacag tacttcggtc 20

<210> 70  
<211> 19  
<212> DNA  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(19)  
<223> intronic J beta 2.6 primer

<400> 70  
atgggagaat acctcgctg 19

<210> 71  
<211> 19  
<212> DNA  
<213> Mus musculus

<400> 71  
ccctaaatgg gagaatacc 19

<210> 72  
<211> 30  
<212> DNA  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(30)  
<223> antisense primer C beate 3

<400> 72  
catcctatca tcaggggggtt ctgtctgcaa 30

<210> 73  
<211> 29  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(29)  
<223> sense primer

<400> 73

ccggaattcc atggggctct cagcgggtgg

29

<210> 74  
<211> 31  
<212> DNA  
<213> Homo sapiens

<220>  
<221> misc\_feature  
<222> (1)..(31)  
<223> antisense primer

<400> 74  
cgcggtatccc tagcctctgg aatcctttct c

31

<210> 75  
<211> 19  
<212> DNA  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(19)  
<223> sense primer for CD3 epsilon

<400> 75  
tgccctctag acagtgacg

19

<210> 76  
<211> 19  
<212> DNA  
<213> Mus musculus

<220>  
<221> misc\_feature  
<222> (1)..(19)  
<223> antisense primer for CD3 epsilon

<400> 76  
cttccggttc cggttcgga

19

<210> 77  
<211> 30  
<212> DNA  
<213> Mus musculus

<400> 77  
atgtgactcc acccaaggtc tccttgtttg

30

<210> 78  
<211> 30  
<212> DNA  
<213> Mus musculus



<400> 78	
aaggctaccc tcgtgtgctt ggccaggggc	30
<210> 79	
<211> 30	
<212> DNA	
<213> Mus musculus	
<400> 79	
catcctatca tcaggggggtt ctgtctgcaa	30
<210> 80	
<211> 30	
<212> DNA	
<213> Mus musculus	
<400> 80	
catcctatca tcaggggggtt ctgtctgcaa	30
<210> 81	
<211> 28	
<212> DNA	
<213> Mus musculus	
<400> 81	
ttcagagtca aggtgtcaac gaggaagg	28
<210> 82	
<211> 26	
<212> DNA	
<213> Mus musculus	
<400> 82	
aagatcctcg gtctcaggac agcacc	26
<210> 83	
<211> 30	
<212> DNA	
<213> Mus musculus	
<400> 83	
actgtgctgg acatgaaagc tatggattcc	30
<210> 84	
<211> 20	
<212> DNA	
<213> Mus musculus	
<400> 84	
gatttaacct gctcatgacg	20

<210> 85  
<211> 12  
<212> PRT  
<213> Mus musculus

<400> 85  
Arg Gly Gly Gly Gly Gly Arg Gly Gly Leu His Asp  
1 5 10

<210> 86  
<211> 4  
<212> PRT  
<213> Mus musculus

<400> 86

Met Met Leu Val  
1